## The Green Supplier Network and Corporate Business and Environmental Goals

Jenni Cawein
Sr. Manager, EHS Engineering
Baxter International





#### Baxter



- Leading healthcare products manufacturer
- IV delivery systems, kidney dialysis, blood products, vaccines, oncology
- \$9 billion global market leader
- 2/3 of operations outside the USA
- Represented in more than 110 countries
- More than 300 facilities
- More than 48,000 employees
- Plastics extrusion and molding, chemical compounding, sterilization, etc.





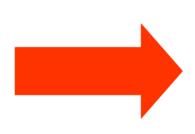
#### Why did we embrace GSN?

- It aligns with current internal strategy, which we believe will bring <u>RESULTS</u>
  - 1. Supply chain focus
  - 2. Integration of environmental initiatives with manufacturing through LEAN





# Why are we partnering with suppliers to enhance sustainability?



Reduce Risk & Reduce Cost





#### Risk Management

- Global environmental regulations
  - A supplier not aware may result in non-compliance for Baxter, which could mean a costly recall.
- Supplier's downtime (e.g. explosion) may be OUR downtime
- Stakeholders may hold Baxter accountable for suppliers' environmental and labor practices
  - Customers, investors ask how we manage our suppliers' environmental and social performance.





## Suppliers can also help us find innovative solutions to reduce:

- Energy
- Packaging
- Waste
- Accidents
- Air Toxics
- Water
- Inventory





which helps us reduce cost.



### BAXTER'S 2003 NON-HAZARDOUS WASTE DISPOSAL AND RECYCLING DATA (MM Lbs)





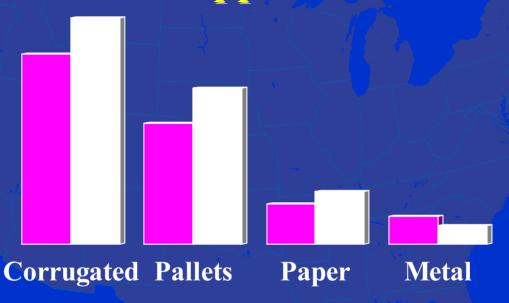
In 2003:

163 MM lbs nonhazardous waste was generated globally





### Much of this waste comes from Baxter's suppliers!



	2000 (MM lbs)	2003 (MM lbs)
Corrugated ☐ Wood Pallets Paper Metal	3.9 1.3 0.9	7.3 5.0 1.7 0.6

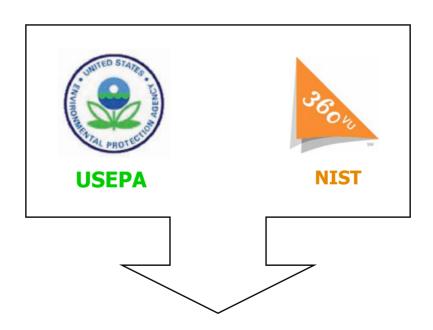
#### Activities with suppliers

- Global Supplier Environmental Questionnaire
  - Questions on conformance, hazardous materials, environmental management systems, waste reduction programs
- Audits and Supplier site visits
- Sustainable Development workshops with key suppliers
- Now, GSN...





## Reason 2: GSN represents a marriage of pollution prevention (Clean) with core manufacturing (Lean) – which we were trying to do internally!







#### Lean and Clean

- Applying lean tools to EHS processes
- Modifying lean tools to focus on environmental aspects (such as water, utilities)
- Adding traditional pollution prevention tools to lean
  - Process mapping and resource accounting





#### Engaging Purchasing

- Key selling points:
  - NIST/Dept. of Commerce (Baldrige)
  - Lean manufacturing
  - Non-profit
  - Government subsidies
  - Business Value
- Initial attempt to squeeze suppliers for cost savings was short-lived because...





#### Leaner, stronger suppliers = stronger Baxter

- Defect reduction
- Better on-time delivery
- Cost containment
- More responsive to our "pull"
  - e.g. inventory size
- Keeping them here (changing suppliers is costly for us)





#### Feedback from Supplier on GSN

- Injection molder (Medegen)
- Engineer spent one week
- Examined every aspect of their operations
- Value stream map of one process line and developed report helps them focus on greatest impacts and prioritize projects.
- 16 opportunities identified: 5 environmental (waste, energy reductions), 15 cost savings (material handling, lean)
- Most importantly, all project ideas have been implemented!





#### Medegen Projects

- Replaced 14 old hydraulic presses with 6 new energyefficient ones
  - Energy usage, hydraulic oil waste, defect waste
- Replaced hazardous solvents cleaner with ultrasonic cleaner
- Moved production from older to newer building
  - Energy efficiency
- Replacement with energy-efficient lighting
- Replacement of pump motors with energy-efficient ones (SOCAL Edison rebate)
- New Quality software system cut paper use in half
- Lean changes in packaging reduce plastic bag and cardboard waste





#### Overall...

- We support GSN because we like the methodology
  - Continual improvement approach, integration of pollution prevention into core manufacturing tools (lean)
  - Similar to what Baxter is doing. We have seen value and results from this approach
- We support GSN because we believe collaborative partnerships are necessary to respond quickly to global trends and achieve breakthrough improvements.
- We support GSN because we believe it will bring value to our suppliers. And the stronger our suppliers, the better we are.



